1. Record Nr. UNINA9910785321203321 Autore Friend Michele Titolo Introducing philosophy of mathematics / / Michele Friend Abingdon, Oxon:,: Routledge,, 2014 Pubbl/distr/stampa **ISBN** 1-317-49378-8 1-317-49379-6 1-315-71205-9 1-282-94327-8 9786612943270 1-84465-376-5 Descrizione fisica 1 online resource (xi, 204 pages) : digital, PDF file(s) Disciplina 510.1 Soggetti Mathematics - Philosophy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali First published 2007 by Acumen. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. Infinity -- 2. Mathematical Platonism and realism -- 3. Logicism --4. Structuralism -- 5. Constructivism -- 6. A pot-pourri of philosophies of mathematics -- App. Proof : ex falso quod libet. In this introduction to the philosophy of mathematics, Michele Friend Sommario/riassunto examines these and other ontological and epistemological problems raised by the content and practice of mathematics. Aimed at a readership with limited proficiency in mathematics but with some experience of formal logic it seeks to strike a balance between conceptual accessibility and correct representation of the issues. Friend examines the standard theories of mathematics Platonism, realism, logicism, formalism, constructivism and structuralism as well as some less standard theories such as psychologism, fictionalism and Meinongian philosophy of mathematics. In each case Friend explains what characterises the position and where the divisions between them lie, including some of the arguments in favour and against each. The book also explores particular questions that occupy present-day philosophers and mathematicians such as the problem of infinity, mathematical intuition and the relationship, if any, between the

philosophy of mathematics and the practice of mathematics. Taking in

the canonical ideas of Aristotle, Kant, Frege and Whitehead and Russell as well as the challenging and innovative work of recent philosophers like Benacerraf, Hellman, Maddy and Shapiro, Friend provides a balanced and accessible introduction suitable for upper-level undergraduate courses and the non-specialist.